

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF FISH AND GAME
MARINE RESOURCES REGION

REPORT FOR THE MONTH OF SEPTEMBER 1970

Dover sole continued as the predominant species in northern California landings while English and petrale sole were the important species at other ports. Processors were operating at plant capacity in the Eureka area and landing limits were imposed on vessels.

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Three defendants who were arrested on May 27, 1970, for killing sea otters, pleaded guilty in the Morro Bay Justice Court, and on September 24, 1970, each defendant was fined \$1,000 and placed on three years of supervised probation. Wardens involved in this arrest deserve a great deal of credit for the very professional job of investigation which was necessary to obtain these convictions.

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A sea otter was observed in a *Macrocystis* bed off Sand Hill Bluff, 4 miles north of Santa Cruz. This is the northernmost observation of sea otters made during the Department's aerial census operations.

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The anchovy reduction season south of Point Conception opened September 15. Price negotiations were settled on the 19th, with the fishermen receiving \$23 per ton. The first landings were made on the 21st, and by month's end 6,340 tons had been delivered by 18 boats. A total of 25 purse seiners have reduction permits.

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The commercial albacore fleet enjoyed catches ranging as high as 900 fish per day, in a month marked by high winds and heavy seas.

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1. WILDLIFE PROTECTION

A. Canneries

The anchovy reduction fishery got underway on the evening of September 20 when twenty-five vessels sailed. In spite of some mechanical difficulties by the receiving plants, anchovy landings have been good with catches averaging over a thousand tons per day. The fish seem to be located primarily in the Catalina Channel.

Albacore deliveries to San Pedro area canneries have slacked off considerably apparently due to bad weather in northern California and Oregon.

B. Market Fish

Landings of broadbill swordfish which had been excellent through July and August dropped to practically nil during the first three quarters of September. However, the last week of September has shown a revival of the fishery and good to fair fishing is now being experienced.

Salmon fishing has been poor and the majority of fish being seen in the southern California markets are from Mexican waters.

C. Sportfish

Although albacore fishing has slacked off in the San Diego area it remains good in the Santa Barbara Channel area as well as off the San Luis Obispo-Monterey county coast. While albacore fishing slacked off, yellowtail action was the best in the past four or five years with excellent catches being made from San Diego to Long Beach.

Rockfish success has generally been good in central and northern California and surf smelt fishing has been extremely good along the Mendocino-Sonoma coast.

D. Weather

Weather was generally normal for this period of the year and very few days were lost due to poor weather. The one exception, however, was in the Eureka area where during the early portion of the month heavy northwest winds of 70 knots brought fishing to a halt.

E. Law Enforcement

Three defendants who were arrested on 5-27-70 for killing sea otters pleaded guilty in the Morro Bay Justice Court, and on 9-24-70 each defendant was fined \$1,000 and placed on three years of supervised probation. Wardens involved in this arrest deserve a great deal of credit for the very professional job of investigation which was necessary to obtain these convictions.

Patrol emphasis during the month centered on the sport landings for over-limit and undersized violations. In the San Francisco area, patrol of illegal commercial abalone violations, as well as surveillance in the San Francisco China Town region for the sale of illegal fish were conducted.

Influx of northern albacore boats necessitated heavy checking for licenses and boat registrations.

F. Pollution

Eighteen oil spills were investigated by Marine Resources Region wardens during the reporting period. Approximately 3,317 barrels of petroleum products were involved.

Eight citations were issued during the month for violation of 5650. Three convictions were obtained.

G. Miscellaneous

A shearwater die-off in the Cayucos-San Luis Obispo area apparently has ceased.

Over the labor day weekend the crew of the patrol boat YELLOWTAIL issued sixty citations for sport fishing infractions off Ventura and Los Angeles county coast.

2. BOTTOMFISH

A. Fishery

Dover sole continued as the predominant species in northern California landings while English and petrale sole were the important species at other ports. Processors were operating at plant capacity in the Eureka area and landing limits were imposed on vessels. Several trawlers switched to albacore fishing on a temporary basis.

Trawlers continued to find good concentrations of Dover sole off Eureka while the fishery off Fort Bragg declined from that of last month. Flatfish landings were light at San Francisco, Monterey, Morro Bay, and Santa Barbara. Occasional catches of up to 4,000 pounds of petrale sole were landed by Morro Bay trawlers.

Roundfish: Catches of rockfish, sablefish, and lingcod declined from those of recent months. A decline in market demand for sablefish caused a decline in trawler landings at Eureka.

B. Research

Flatfish: Landings of bottomfish were sampled for age and size composition at major ports. Ageing of flatfish samples was continued during the month as was work on age validation for petrale and Dover sole.

Fifty-two Dover sole tagged in 1969 off Eureka were recaptured near release areas by trawlers. A Dover sole released by the Oregon Fish Commission was also caught by a Eureka trawler. Two petrale tagged in 1964 off Fort Bragg and two English sole tagged in 1968 in Monterey Bay were recaptured by fishermen; all four were caught near tagging areas.

An inventory of our data collected during the past decade is near completion.

Roundfish: A roundfish cruise in the Monterey Bay area was completed aboard the R/V NAUTILUS. Fishing was accomplished with longline gear to study the ecology, distribution, and abundance of roundfish at various depths.

3. SHELLFISH

A. Fishery

Crab: Season closed. San Francisco area landings through June were 1.45 million pounds, the highest since the 1960-61 season. Northern California, Crescent City to Fort Bragg, landings through June were slightly in excess of 14 million pounds.

Shrimp: Areas A (Crescent City-Eureka) and B-2 (Bodega Bay) are closed but Area B-1 (Fort Bragg) and Area C (Morro Bay-Avila) remain open. No effort has been reported in Area B-1. Area C landings total 59,204 through September 6. Of this 49,285 pounds are ocean shrimp and 9,919 pounds are spot prawn landings. Although comparatively small, these are the highest landings of ocean shrimp in Area C since 1960 when 74,900 pounds were landed. Also, to the best of our knowledge, it marks the first for trawling and selling spot prawns in the area. The spot prawn catches have been coming off of Santa Rosa Island in the Santa Barbara area.

Oysters: At Eureka, Coast Oyster reports that the mortality has tapered off as is usual for this time of year and that oyster condition is slightly better than average.

A small shipment of scallops, abalone, oysters and clams were inspected for pests at Menlo Park. These shellfish which came from Japan were brought in by Dr. Imai of International Shellfish Enterprises for planting on P.G.&E. property at Moss Landing.

B. Research

Crab: A 14-day cruise (70-N-14) was conducted aboard the R/V NAUTILUS. Fourteen crab tows and 7 trap sets (4-40" and 4-28" traps) were made. Six tows and four trap sets were made in outer Bodega Bay and produced a total catch of 1,170 crabs. The tows were especially productive in reference to juveniles (1970 year class), which comprised 68% of the catch. Drakes Bay produced 167 crabs from 4 tows and 1 trap station. All but one were adults. Four tows and 1 trap set at Four Fathom Bank produced 238 adults and 6 juveniles for a total of 244 crabs.

Growth studies continued at Pt. Molate near Richmond. Seventy-two *C. magister* with an average size of 68mm were caught this month. This was an average increase in size of 13mm over last month.

At Eureka, work continued on the Crab Bulletin. The first draft of the sections on Food Habits and Relative Abundance Studies has been completed. Project personnel spent most of the month on vacation.

Shrimp: During the R/V NAUTILUS cruise 70-N-14, 14 shrimp tows were made off the Russian River in 40 to 50 fathoms and one shrimp tow was made off Pt. Reyes in 44 to 46 fathoms. Ten samples of shrimp were obtained off the Russian River and only five shrimp were caught off Pt. Reyes. Catch rates ranged from 1½ to 456 pounds per hour. The samples were brought back to the laboratory and sexed, measured and weighed. Heads-on counts per pound averaged 98 with a range of 92 to 106. Year class composition was 62.5 percent one year old, 36.7 percent two year old and 0.8 percent three year old shrimp.

At Eureka, forty-three hake stomachs were examined for relative abundance studies of ocean shrimp. A total of 259 shrimp were observed; 75 percent of these were 1970 year class shrimp.

4. SHELLFISH LABORATORY OPERATIONS (Bartlett Project M-64-R-6)

A polyethylene liner was fabricated and installed in the 20,000 gallon redwood seawater storage tank to provide a barrier against shipworm boring. Plumbing from the 20,000 gallon tank to the laboratory is complete. Hookup of the seawater system to the filters, filtered water storage reservoir and pumps - the final phase to complete the laboratory water system - was in progress at the month's end. Placement and electrical connections to the air blower, heated seawater pump, and the U.V. sterilizer, constant temperature room and water boiler have been completed.

Water into the laboratory should be flowing by early October - about one month later than originally anticipated.

5. OYSTER DISEASE AND MORTALITY STUDY (B.C.F. Contract)

Routine observations were made in all oyster production areas during September. It appears as though the summer mortality period is over since survival among all stocks is much improved.

A sample of shrimp, *Penaeus japonicus*, from Japan was examined for possible pathogen organisms. None was found and the shipment was certified as being acceptable for planting in State waters. These shrimp will be used by a private company in mariculture activities.

The processing and examination of samples of oyster tissues is continuing.

The program is on schedule.

6. SEA OTTER

Much of the month was spent in outfitting the new 23 foot Thunderbird skiff presently in use by the sea otter project for ocean operations.

Wilson spoke with a reporter from the National Parks Magazine on the subject of sea otter transplants.

An aerial census of sea otters was conducted on September 16 and 17 from Davenport in Santa Cruz County to the vicinity of Avila in San Luis Obispo County.

Difficult censusing conditions prevailed throughout operations and resulted in a low count of only 612 sea otters from Davenport to Point Estero. These adverse censusing conditions were caused by extensive kelp beds characteristic of the mid-summer to late winter months. The previous highest counts of 1,040 and 1,014 in May 1970 and June 1969 respectively were achieved during intervals of minimum kelp growth.

One sea otter was observed in a *Macrocystis* bed off Sand Hill Bluff, 4 miles north of Santa Cruz. This is the northernmost observation of sea otters made during the Department's aerial census operations.

Project personnel and other researchers excised tissue samples from the carcass of a young female sea otter recovered from Elkhorn Slough.

These samples, including specimens from the brain, liver, bone marrow, and body fat as well as stomach contents, will be analyzed for chlorinated hydrocarbon pesticide content at Hopkins Marine Station in Pacific Grove.

Analyses conducted on other sea otter carcasses at Hopkins revealed an average of 8 ppm in the body fat. The maximum level, 36 ppm (body fat), was recorded from an otter carcass recovered from the Cambria area. Examination of the alimentary canal of this same animal revealed one of the highest parasitic infestations of the spiny-headed worm (*Acanthocephalus*) yet observed in a California sea otter.

The incidence and regularity of documented sightings of individual sea otters north of Seaside (Elkhorn Slough and Santa Cruz areas) has shown an apparent increase.

Habitat reconnaissance studies have been initiated to assess the suitability and extent of potential sea otter habitat in north Monterey Bay, from Capitola to the vicinity of Davenport, prior to any natural northward movement of large numbers of sea otters into the area. Data gathered during this survey include observations as to the abundance and distribution of preferred sea otter forage items, such as abalone, sea urchins, crabs and associated marine species. This information is being collected through a series of general habitat reconnaissance dives and biological transects. The extent, condition and permanency of kelp beds and water quality data are also being recorded.

The experiments to investigate the use of standard and infra-red photographic techniques and thermal imagery for censusing sea otter populations are scheduled with Dr. Mullen of Santa Barbara in October.

Wilson spent the week of September 7-11 on vacation.

The Associate position vacated by Mel Odemar has not yet been filled.

7. ABALONE

Project members spent most of the month working on the fall ecological survey at Diablo Canyon. Nine of eleven benthic stations were completed. The bull kelp, *Nereocystis luetkeana*, canopy was considerably thinner compared to the corresponding 1969 survey. Counts of rockfish, mainly the blue rockfish, *Sebastes mystinus*, were at a low for the year. Unusual fish observed included a school of about 40 senioritas, *Oxyjulis californica*, and a single sheephead, *Pimelometopon pulchrum*.

A fall fish collection was also completed at Diablo. Nine Department divers occupied three stations at 70', 20', and 10' depths. Bob Lavenburg and Camm Swift, Los Angeles County Museum, assisted in fish sorting and identification. At least 15 species that were not found during the May 1969 survey were collected. Stichaeids, including large numbers of the rock prickleback, *Xiphister mucosus*, were abundant at the 10' station. Several large monkeyface-eels, *Cebidichthys violaceus*, were also collected in shallow water.

8. PELAGIC FISH

A. Fishery

Landings in tons	September		January 1 - September 28		
Species	1970*	1969	1970*	1969	10 yr. mean 1959-1968
Anchovy	7,342	2,677	43,319	19,786	6,607
Mackerel, jack	2,513	2,823	14,342	20,902	21,120
Mackerel, Pacific	5	132	146	971	7,354
Sardines	78	3	215	43	4,654
Squid	161	26	5,784	8,623	6,452
TOTAL	10,099	5,661	63,806	50,325	46,187

* Estimated. Accumulated landings are revised monthly.

Anchovy: The anchovy reduction season south of Point Conception opened September 15. Price negotiations were settled on the 19th, with the fishermen receiving \$23 per ton. The first landings were made on the 21st, and by month's end 6,340 tons had been delivered by 18 boats. A total of 25 purse seiners have reduction permits.

Approximately 855 tons were landed under a special reduction permit in the southern permit area before the regular season began.

The reduction season north of Point Conception has slowed to a standstill with no landings since mid August.

Jack Mackerel: Approximately 2,513 tons were landed during the month. Fishing effort centered around San Clemente Island and Santa Catalina Island.

Pacific Mackerel: One small load of fish was taken at San Clemente Island.

Sardines: Several small or mixed loads taken near La Jolla. The sardine bait season was closed effective midnight, September 16.

B. Live Bait

September was a good month for live bait haulers. Demand for live bait generally has decreased with the end of the summer vacation season, but it has been extended in the San Diego area by good yellowtail fishing. San Diego bait haulers also have found themselves fortunate in not having to draw upon Los Angeles - Long Beach Harbor for bait this summer.

Except for some localized situations of short duration, bait was both plentiful and available to bait haulers. Morro Bay, for example, reports this to be its best September in five years as far as the availability and quality of live bait is concerned.

C. Sea Survey Data Analysis

A fish kill was observed at San Clemente Island after the Navy detonated a large charge of explosives. Most of the fish killed were shortbelly rockfish ranging from 1 to 3 inches in length. Two interesting species of fish were collected; one is the rarely gathered slender snipefish,

Macrorhamphosus gracilis, while the other is an undescribed species of rockfish.

Several programs were written for the programma 101 to speed other projects in processing their data.

Many letters, details, and arrangements were attended to and worked on for the upcoming CalCOFI conference.

At month's end Knaggs left on Sea Survey Cruise 70-A-7.

D. Fisheries Resources Sea Survey (M63R)

A night light - blanket net survey from Port Hueneme to Sebastian Viscaino Bay, Mexico was completed September 17. Pacific saury and market squid were the two most frequently observed species. Pacific mackerel were observed at 4 stations off Mexico. Only one, young-of-the-year, Pacific sardine was observed during the entire trip.

Sea Survey data for 1968 is ready to be printed as CalCOFI Data Report 18. The 1969 data is ready for a final computer run.

The R/V ALASKA departed on the 28th for Mexico on a 25-day anchovy survey cruise.

9. BIG GAME FISH

A. Albacore

Research

Life History: Migration -- sixty-five albacore were tagged and released by biologists aboard the PACIFIC CLIPPER and the R/V N. B. SCOFIELD. There have been no recoveries of these tagged albacore to date.

Age and Growth: Five hundred length measurements and 100 scale samples were obtained from the landings made at Terminal Island canneries.

Population Dynamics: Over 200 logbooks were collected from the albacore fleet; of these, 106 were logs from September trips. These trips represented over 80,000 fish or better than 750 fish per trip. Since most landings for September were made in central and northern California ports, these logs represent a small percentage of the total landings for the State.

Fishery - Sport: The San Diego fleet enjoyed spurts of fishing activity during September, but these catches were nowhere near as large as the August catches. Oxnard sport boats found good fishing near Anacapa early in the month, and the Morro Bay fleet experienced good fishing inshore whenever wind and sea abated.

Commercial: In a month marked by high winds and heavy seas, the commercial fleet enjoyed catches ranging as high as 900 fish per day, while fishing 35-150 miles offshore from central California. Pt. Arena, Monterey, Pt. Sur, and the Davidson Seamount are areas where good fishing was found during September, although the water temperature dropped and five out of seven days were rough and windy. Bait boats in Oregon and Washington did well during lulls in the weather, but all were blown into port by the end of the month. Northern California boats had a few good

days, but they were hampered by the weather. Southern California fishing was nearly at a standstill. Recent figures show that August 1970 albacore landings were more than twice those for August of last year.

B. Bluefin

Research

Population Structure: Over 350 bluefin eye lenses, collected in 1969, have been processed for analysis.

Life History: Age and growth -- reading of the scales, which will lead to an age determination of the 1969 bluefin migration, was started.

Fishery

Commercial: Fishing continued poor, and the 1970 season apparently is ending. Only 35 tons were reported caught during the month - all from "local" waters.

The 1970 season started almost a month late, and the fishing areas which usually produce large catches have not been very productive. These facts, combined with an apparent early close of the season, may make 1970 one of the poorest bluefin seasons on record. To date only 4,167 tons have been landed, compared with a normal catch of about 7,000 tons for this time of year.

Captains attribute the poor catches to "dirty water" on the inshore banks early in the season, and to an influx of unusually warm water which kept the bluefin offshore and deep.

Sport: Scattered catches of small 12-15 pound bluefin were reported by sportfishing landings in southern California.

C. Bonito

Research

Population Structure: Bonito eye lenses were obtained from areas off Mexico and southern California and stored frozen for future processing.

Life History: Age and growth -- seven age-length-weight samples were taken from bonito landed at Terminal Island canneries.

Migration: Project personnel spent part of September tagging bonito aboard the R/V N. B. SCOFIELD. Early in the month 604 bonito were tagged and released in southern California waters. On September 18th, the vessel departed for Baja California and will return October 2nd.

Data from one of ten bonito tags returned this month showed that fish had moved from Aliso Beach near Dana Pt., to Redondo Beach -- a distance of 50 miles in 31 days.

Fisheries and Economics

Commercial: Bonito catches by the local fleet were good during the first half of the month, but declined on September 15th when a large part of the fleet diverted to anchovy fishing. All of the 750 tons landed were taken in southern California waters.

An additional 488 tons were landed during the last three days of August, bringing that month's total to 1,190 tons. Fishermen now are receiving \$180 per ton for large bonito, with another price increase reportedly set for January 1971.

Sport: Bonito dominated the partyboat catch off southern California this month, with some landings reporting over 1,000 fish per day.

MISCELLANEOUS

Big Game Resources

The Federation of Japan Tuna Fishery Cooperative Associations (called NIKKATSUREN) has noted the decreasing catch-per-unit-of-effort figures for the longline fishery on southern bluefin, *Thunnus maccoyii*, they are voluntarily regulating this South Pacific fishery.

The sportfishing fleet harvested quantities of skipjack while trolling for albacore off southern California.

10. SPORTFISH

A. Partyboat

Research: Although a 2-week cruise on the N. B. SCOFIELD in Baja California has not been completed, 700 sand bass and 5 yellowtail have been tagged.

Fishery: One thousand one hundred and one anglers fishing from the partyboat RETREAT off Port Hueneme, landed 4,802 sand bass during August, averaging 4.4 fish per man. Sand bass are uncommon north of Santa Monica Bay.

General: New plans and specifications for the wet laboratory required most of a man-month.

B. Central California Marine Sportfish Survey

Routine skiff and partyboat sampling was conducted at all ports from Princeton to Morro Bay.

Fish tagging and kelp growth studies were continued in the Hopkins Reserve area. Twenty-seven (27) fish were tagged and 5 tagged fish were returned by sport fishermen.

One week was spent on literature research for the revised field guide.

Jim Houk and Jim Gates operated the OPHIODON in the underwater advisory board of Beaches and Parks' survey of Point Lobos.

Miller returned to work on September 18.

11. INSHORE FISHERIES HABITAT EVALUATION AND MONITORING

Project personnel conducted an environmental survey off Naples, Santa Barbara.

At the request of the State Health Department, Pismo clams (1 lb. of meat) were collected for pesticide analysis. Several species of rockfish were also caught for this purpose.

On September 23 and 24, our project participated in a very successful fish collection off Diablo Canyon. More kinds and numbers of fish were taken than in May when a similar survey was made.

Several days were spent in preparation for the Diving Workshop that is to be held at Tomales Bay on October 7th and 8th.

SAN ELIJO-SAN DIEGUITO SURVEY (Contract FGS-1451)

The final report is being prepared for printing as a MRR Reference Report.

ENVIRONMENTAL AND BEHAVIORAL STUDIES OF COASTAL SPORT FISHES (DJ-F22R)

During the last week of August we made survey dives on oil towers HAZEL and HILDA, in the Santa Barbara Channel and Richfield's Rincon Oil Island, at Mussel Shoals. Large fish populations were observed at all three locations. Olive rockfish, *Sebastes serranoides*, were particularly abundant at HAZEL and HILDA. Invertebrate and algal growth was very heavy.

We completed our quarterly CONES survey off Palos Verdes Point, during the month.

We spent an evening surveying Santa Monica Bay with Jim Fish of the Naval Undersea Research and Development Center, San Diego. His specialty is bioacoustics and our survey was to locate a concentration of cyclic knocking sounds made by an as yet unknown animal. The latest suspect of this "carpenter fish" sound is the large mantis shrimp, *Hemisquilla styifera*. While many choruses of the hammering sound were heard, no heavy concentrations were found. We plan to make several dives in the area to check for concentrations of the mantis shrimp.

We were able to check on the transplanted *Macrocystis* only once during the month. About 60 plants remain at each station (45 and 20 feet deep). Numerous fish (black perch, *Embiotoca jacksoni*, kelp bass, *Paralabrax clathratus*, and senorita *Oxyjulis californica* are orienting to the kelp, particularly at the 45-foot station.

Two fishing trips were taken to assist Herb Frey in collecting specimens from Santa Monica Bay for pesticide analysis.

Project personnel participated in a very successful fish collection at Diablo Cove, San Luis Obispo County, near the site of Pacific Gas and Electric's nuclear steam-electric-station.

12. SPECIAL PROJECTS

A. Southern California

A deluge of Army Corps of Engineers Environmental statements on projects up and down the coast came in and were evaluated. Included were harbor developments at Ventura Marina, San Diego Bay, Port Hueneme, Monterey and Port San Luis and a shore protection project on Pt. Loma. A good

part of the month was spent preparing the evaluations; all of them had short deadlines.

A live sample of a Japanese shrimp, *Panaeus japonicus*, destined for local pond culture, was shipped to Menlo Park for inspection. Permits were issued for the venture.

An evaluation was prepared on a research proposal on dinoflagellates submitted by a U.C. Berkeley professor. He is hoping to obtain financial assistance.

Intense red tides have prevailed in the basin behind the laboratory almost continually for three weeks. Sporadic outbursts have been evident along much of southern California coast. During the first week of the bloom in the basin, starting on September 8, two dinoflagellate species, *Ceratium furca* and *Gonyaulax polyedra* were the dominant species and were present in almost equal numbers. During the second week *C. furca* became considerably more abundant than *G. polyedra*.

B. Northern California

This month about a quarter of the time of this project has been supplying information on shellfish farming to the public. The Tomales Bay Wildlife Plan, last of the scheduled plans for northern California bays, has been compiled at the field level and submitted to Sacramento for review and editing.

C. Environmental Services

Water Quality and Pollution Activities

Comments and recommendations were forwarded to the Regional Water Quality Control Board regarding the following discharges:

- (a) Ventura Avenue Waste Water Disposal Committee, Ventura County.
- (b) City of Los Angeles, Hyperion Treatment Plant, Playa del Rey.
- (c) County Sanitation Districts of Los Angeles County, Joint Water Pollution Control Plant, Whites Point.
- (d) Standard Oil Company of California, El Segundo Refinery.
- (e) City of Los Angeles, Fish Cannery Waste, Los Angeles Harbor.
- (f) City of Los Angeles, Terminal Island Treatment Plant.
- (g) Halaco Engineering Company, Oxnard, Ventura County.
- (h) San Diego Unified Port District National City, San Diego County.
- (i) Southern California Edison Company - San Onofre Nuclear Generating Station - Sand Disposal, San Diego County.

Pesticides and Heavy Metals

The California Regional Water Quality Control Board, Los Angeles Region has requested a Public Hearing before December 24, 1970 on Pesticides and Heavy Metals in the marine environment. Recent reports concerning ocean waste outfalls indicates that 200 to 500 lbs. per day of DDT may be discharged from Los Angeles County's White Point Discharge. If true this

may necessitate considerable assistance of Department of Fish and Game staff personnel to rectify the situation.

Long Beach Harbor - Los Angeles County

The California Regional Water Quality Control Board has announced its intention to clean up Long Beach Harbor. A Public Hearing has been set for November 18 to hear testimony on this subject. This move follows the recent improvement of water quality in Los Angeles Harbor - Dominguez Channel.

13. MARINE FISHERIES STATISTICS

A. Source Documents

The July market trawler and shrimp receipts and August cannery receipts were edited and closed. September cannery receipts are being processed. Cannery listing for July was checked.

The routine delinquent lists for August were compiled and mailed and the list of unregistered boats prepared for the hot list.

The files for the years 1965 through 1968 were rearranged in their proper order.

A considerable amount of time (25 man-days) was spent in pulling 5 years of records which were subpoenaed by the superior court.

B. Machine Data Processing

Fourteen 1969 annual reports were processed including the 1969 bulletin report.

Salmon sampling decks were prepared for Pat O'Brien and shrimp market sampling decks for Tim Farley.

The August processor report was run and a salmon report giving pounds and value by county was prepared for Stan Kabel.

An employee alpha listing was sent to the training officer for updating and editing.

C. Fishery Surveillance

A weeks field trip along the coast contacting dealers in Santa Barbara, Avila, Morro Bay, Monterey, Moss Landing, Santa Cruz and Half Moon Bay was successfully completed. At the Morro Bay Lab, Dick Burge was contacted regarding work on the abalone conversion weights and we hope to get started as soon as a scale can be obtained through our lethargic purchasing procedures.

Several local bait dealers were contacted regarding anomalies in their receipts.

A new but as yet unlicensed, (and not yet operational) abalone processor in Wilmington was contacted to ask cooperation on obtaining abalone weights and sizes in their plant and they were very agreeable and interested.

D. Ecology and Vital Statistics

Physical Data Bank: This month Marine Fisheries Statistics received oceanographic station computer tapes from NODC (National Oceanographic Data Center, Washington, D. C.). These were provided to the Department in recognition of past contributions to CalCOFI programs.

Mr. Nelson C. Ross, Jr., NODC PAC Liaison Officer visited our installation to provide consultive help in the creation of a data bank for the Department.

First steps were taken to provide Dan Gotshall with historical upwelling data for the coastal area, Blunt's Reef to Point St. George. The shrimp fishery will be examined in terms of Ekman transport.

14. VESSELS

ALASKA

From the 1st through the 4th, the vessel conducted Pelagic fish studies off southern California. From the 8th through the 17th the ALASKA conducted Pelagic fish studies off Baja California. Remainder of the month, on CTO and maintenance.

N. B. SCOFIELD

From the 1st through the 10th the vessel conducted a bonito tagging off southern California coast. From the 18th through the 30th the N. B. SCOFIELD engaged in Sportfish studies off Baja California.

NAUTILUS

From the 1st through the 13th the vessel conducted a crab study off San Francisco. From the 15th through the 21st the NAUTILUS conducted rockfish studies off Monterey Bay. Remainder of the month on CTO.

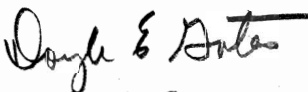
15. MISCELLANEOUS

A. Meetings, Talks, and Visitors

September 2	-Ebert, Wild and Haseltine met with Anthony J. Harrison, Fisheries Division of the State of Tasmania, Australia at the marine culture laboratory to exchange information on mariculture.
September 4	-Orcutt met with the Special Task Force on nuclear power plant siting problems of P.G.&E., San Francisco.
September 14	-Gotshall met with Jack Zorn, Director of Industrial Development, Humboldt Council of Chambers of Commerce, to discuss potential new industries associated with sport and commercial fishing.
September 24	-Burge and Schultz presented a lecture to the Central Coast Sealions on California abalones and the Department's work at Diablo Canyon.
September 25	-Baxter, Gates and Ganssle attended CalCOFI meeting at La Jolla.

E. Personnel

July 31	-Bruce K. Sanford, F & G Warden, Morro Bay promoted to Lieutenant, F & G Patrol Boat, LODI, Region II.
August 28	-Anthony Black, Master Fisheries Vessel, "SCOFIELD" Research Vessels appointed TAU.
August 28	-Lloyd C. Beard, Ship's Cook, "SCOFIELD", Research Vessels, appointed permanent.
September 1	-Patrick C. Collier, Assistant Marine Biologist, Shellfisheries, Menlo Park, appointed permanent.
September 1	-Thomas G. Riley, Fish and Game Warden, Marine Patrol Morro Bay, appointed permanent.
September 1	-Gary D. Paoli, Fish and Game Warden, Marine Patrol, Long Beach, appointed permanent.
September 1	-Frank M. Moore, Fish and Game Warden, Marine Patrol, San Diego, appointed permanent.
September 1	-Ida K. Wade, Key Punch Operator, ORB transferred to Marine Resources Region, Long Beach.
September 1	-James W. Dixon, Fish and Game Warden, Marine Patrol, Long Beach, transferred to Fall River Mills, Reg. I.
September 4	-Anthony Black, Master Fisheries Vessel, "SCOFIELD", Research Vessels, appointed permanent.
September 15	-Ethel A. Hardwick, Clerk Typist II, Part-time, Marine Fisheries Statistics, Eureka, transferred to Region I.
September 23	-Melvyn W. Odemar, Associate Marine Biologist, Sea Otter Project, Monterey, resigned to accept FAO assignment.



Doyle E. Gates
Regional Manager, MRR

WILDLIFE PROTECTION BRANCH MONTHLY REPORT FORM

Region MRR

Fill-In Section

Report for Month of Sept. 1970

A. Reserve Warden Activities

1. Number of patrols made by reserve wardens	<u>18</u>
2. Hours worked	<u>125</u>
3. Arrests or citations issued by reserve wardens (Wardens not present)	<u></u>
4. Arrest Assists or Citations Issued by Reserve Wardens (Wardens present)	<u>21</u>
5. Personal vehicle miles traveled on patrol	<u>0</u>
6. Personal vehicle miles traveled to and from assignment	<u>455</u>

B. Hunter Safety Training Program

1. Time spent on hunter safety training	<u>4</u>
2. Hunter safety instructors contacted	<u>4</u>
3. Hunter safety training classes attended	<u>3</u>
4. Hunter safety instructor classes attended	<u>0</u>

C. Deer Accidentally Killed

1. Road kills by motor vehicles	<u></u>
2. Kills from other causes (railroads, canals, dogs, etc.)	<u></u>

D. Arrest Report

Number of persons arrested as compared to same periods last year:

<u>457</u>	<u>463</u>
Current Month	Same Month Last Year
<u>3331</u>	<u>2601</u>
Total Arrests This Year	Total Same Period Last Year

Remarks - (To explain any marked changes in above totals)

Wildlife Protection Branch Monthly Report - Page 2

Fines paid

<u>\$9786.50</u>	<u>\$7,930.00</u>
Current month	Same month last year
<u>\$74,776.80</u>	<u>\$57,570.80</u>
Total fines this year	Total same period last year

Remarks (To explain any marked changes in above totals)

Jail days served	5
Jail days suspended	0
Cases dismissed	28
Cases in which all of fine was suspended	29
Juvenile cases turned over to juvenile authorities or parents contacted	-
Hunting licenses revoked by court	-
Hunting licenses suspended by court	-
Angling licenses revoked by court	-
Angling licenses suspended by court	-

Summary: Following is the number of violations prosecuted against type of violation

Hunting no license	0	Angling no license	317
Waterfowl.	0	No Colo. Riv. Use Stamp.	0
Deer	1	No inland stamp.	0
Pheasant	0	Trout.	0
Loaded gun in car.	5	Other inland fish.	0
Public shooting area trespass.	0	Angling more than one rod.	5
Trespass (2016-18)	0	Clams and shellfish.	77
Resident small game.	1	Commercial abalone	2
Doves.	0	Commercial lobster	0
Pigeons.	0	Commercial fish.	8
Bear	0	Ocean sportfish.	35
Baited pond shooting	0	Pollution (5650)	3
Protected nongame birds and fully protected birds	1	Stream obstruction (5948).	0
Litter (5652).	1	Suction dredge (5653).	0
		Miscellaneous.	1
		Total.	457

E. Assistance to Other Law Enforcement Agencies

1. Number of cases filed by Wildlife Protection officers for violation of Penal or other code sections _____
2. Number of cases filed by Wildlife Protection officers for city or county ordinances _____
3. Number of cases turned over to federal agencies for filing _____
4. Number of cases of assistance to other agencies resulting in filing of charges (not included in 1, 2, or 3 above) _____
5. Number of cases involving felony charges _____